

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 86-15

ORDER AMENDING ORDER NO. 73-77
WASTE DISCHARGE REQUIREMENTS FOR

CITY OF SANTA CLARA
SOLID WASTE DISPOSAL SITE
SANTA CLARA, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. The Regional Board, on December 27, 1973, adopted Order No. 73-77 prescribing waste discharge requirements for the City of Santa Clara Solid Waste Disposal Site, Santa Clara County.
2. The Regional Board, on June 19, 1985, adopted Order No. 85-78 amending Order No. 73-77 to adopt closure requirements for the City of Santa Clara Solid Waste Disposal Site, Santa Clara County.
3. Provision C.2. of this Board's Order No. 73-77 provides that the discharger shall submit to this Board's Executive Officer for approval, plans and specifications describing the site preparation, construction and filling procedures and sequence prior to commencing operations in each subsequent disposal area. The discharger is in the process of closing areas 1 and 2, and has requested to proceed to fill areas 3 and 6, hereinafter referred to as Parcel 3/6, as shown on Attachment A.
4. Preparation and development of the 45 acre Parcel 3/6 as a Class III (new definition) sanitary landfill is subject to revised regulations governing discharges to land, Title 23, Chapter 3, Subchapter 15 of the California Administrative Code. These revised regulations became effective on November 27, 1984.
5. The discharger has submitted a report entitled "Geotechnical Investigation, City of Santa Clara Sanitary Landfill, Parcel 3/6 Landfill Development Study", dated September, 1985. The report, prepared by EMCON Associates (Project 601-0.03) documents that the site is underlain with interbedded clays and sands to a minimum depth of 90 feet below the ground

surface. The near-surface soils (upper 6 to 15 feet) generally consist of clayey soils ranging from clays to clayey sands. Permeability tests of the near-surface soils indicate a Coefficient of Permeability of 6×10^{-6} cm/sec to 2×10^{-8} cm/sec.

6. Subchapter 15 provides that Class III landfills shall be located where site characteristics provide adequate separation between nonhazardous solid waste and waters of the State, and that the landfill shall be operated to ensure that wastes will be a minimum of 5 feet above the highest anticipated elevation of underlying ground water. The separation requirement is not considered met due to the fact that capillary forces cause ground water to rise into the upper unsaturated zone of clayey soil.
7. To remedy the above cited groundwater separation issue the discharger has proposed to install a leachate collection and removal system pursuant to a report entitled "Leachate Collection and Removal System, City of Santa Clara Sanitary Landfill, Parcel 3/6", dated December, 1985. This report was prepared by EMCON Associates (Project 598-01.01). The Board finds that the proposed system is a specific engineered alternative that is consistent with the performance goal and which affords equivalent protection against water quality impairment.
8. The discharger has submitted a report entitled "Operations and Development Plan, City of Santa Clara Sanitary Landfill, Parcel 3/6 " dated October, 1985. This report was prepared by EMCON Associates (Project 598-01.03).
9. By letter dated December 18, 1985, the discharger has requested to revise the final contour plan for Area 1, to include an 11 acre designated waste to energy site. The original final contour plan was submitted with the Closure Plan, adopted under Order No. 85-78. The waste to energy site is part of Area 1, which is an approved landfill site under Order No. 73-77. The final contour plan needs to be amended to include the waste to energy site, to allow for adequate disposal capacity during site preparation of Parcel 3/6.
10. The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin on July 1, 1982 and this Order implements the water quality objectives stated in that plan.

11. This Order authorizes the filling of Parcel 3/6 of the City of Santa Clara Landfill. The order governs maintenance of an existing facility and does not have a significant effect on the environment pursuant to Section 21084 (a) of the California Environmental Quality Control Act and Section 15310 of the Resources Code.
12. The Board has notified the discharger and interested agencies and persons of its intent to amend waste discharge requirements, and has provided them with an opportunity to submit their written views and recommendations.
13. The Board heard and considered in a public meeting all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 73-77 is amended as follows:

- I. The following Specifications are added, as Discharge Specifications A.16 through A.21:
 16. Parcel 3/6 shall be closed in accordance with plans submitted on February 5, 1985 by the City of Santa Clara. These plans were compiled by EMCON Associates and are labelled 'Project 601-01.03' on the cover page of the technical report.
 17. The final contour plan of Area 1 shall include the 11 acre specified waste to energy site, as identified in the closure plan submitted on February 5, 1985.
 18. Parcel 3/6 shall be underlain by a leachate collection and removal system which shall be constructed as described in the document cited in Finding 7.
 19. Parcel 3/6 shall be operated and developed pursuant to plans and specifications describing site preparation, construction and filling procedures and sequence, as described in the document cited in Finding 8.
 20. The leachate collection and removal system shall be maintained and operated to prevent the buildup of hydraulic head on the bottom of the landfill. This system shall be inspected monthly, and any accumulated fluid shall be returned to the landfill unit from which it came or discharged in another manner approved by the Board.
 21. The discharger shall assure that the foundation of the site, the refuse fill, and the structures which control leachate, surface drainage, erosion and gas for this site are constructed and maintained to withstand conditions generated during the maximum probable earthquake.

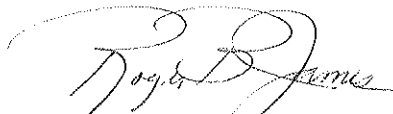
II. The following Discharge Prohibitions are added, as Discharge Prohibitions B.3 and B.4:

3. Hazardous and designated wastes as defined in Sections 2521 and 2522 of revised Subchapter 15, shall not be deposited or stored at this site.
4. High-moisture-content wastes (those containing less than 50% solids) other than water supply and waste-water treatment sludges shall not be discharged into the disposal area without prior written approval by the Executive Officer. Such approval shall be granted only if there is adequate moisture holding capacity in the landfill based upon mass balances and previous monitoring of the relevant leachate control facility. A minimum solids-to-liquids ratio of 5:1 by weight must be maintained for the disposal operation overall. Furthermore, sludges shall not be discharged into the disposal area unless they contain at least 20% solids if primary sludge, or at least 15% solids if secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge.

III. The following Provisions are added, as Provisions C.13 through C.15:

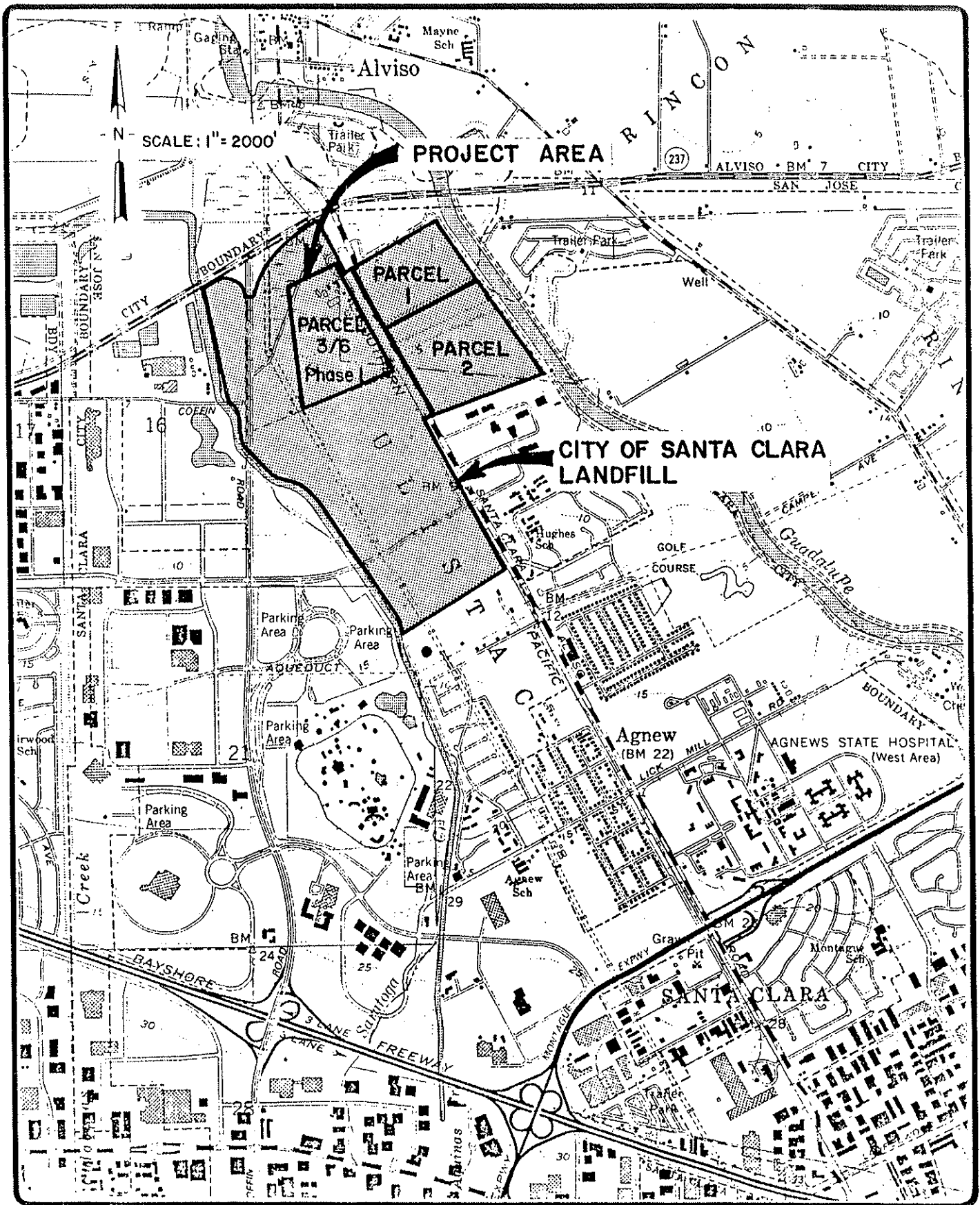
13. The discharger shall submit a proposal by April 15, 1986 for a periodic load checking program which will discover and discourage attempts to place hazardous or designated wastes in the landfill disposal areas. This proposal must be approved by the Executive Officer before refuse can be accepted for disposal at the site.
14. The discharger shall submit quarterly reports in accordance with a self-monitoring program, beginning three months after the first refuse is placed in Parcel 3/6 disposal area.
15. The discharger shall cause the removal and relocation of any wastes which are discharged at this site in violation of these requirements.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on March 19, 1986.


ROGER B. JAMES
Executive Officer

Attachment

A. Site location map



EMCON
Associates

San Jose, California

CITY OF SANTA CLARA
PARCEL 3/6 SANITARY LANDFILL
SANTA CLARA, CALIFORNIA

LOCATION MAP

FIGURE

1

PROJECT NO
598-01.03